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COLOSSAL STATUE OF PETER THE GREAT.

[Bronze Statue of Peter the Great at St. Petersburgh.]

THE following account is abridged, with a few trifling alterations, from Dr. Granville's Travels:—

At St. Petersburgh, in the square opposite the Isaac-bridge, at the western extremity of the Admiralty, the colossal equestrian statue of the founder of that magnificent city, placed on a granite rock, seems to command the undivided attention of the stranger. The huge block of granite which forms the pedestal, upwards of fifteen hundred tons in weight, was conveyed from a marsh at a distance of four English miles from St. Petersburgh, and two miles from the sea.

In a grooved railway, corresponding with an opposite grooved space, fixed to the basis of the rock, were placed cannon balls; and as the stone was moved forwards, by means of ropes, pullies, and windlasses, drawn both by men and horses, the balls over which it had passed were brought to the front. A drummer was stationed on the rock to give a signal to the workmen. Its size, when

brought to St. Petersburgh, was between forty and fifty feet in length, upwards of twenty in breadth, and as much in height.

On approaching near to the rock, the simple inscription fixed on it in bronze letters, "Petro Primo, Catharina Secunda, M,DCCLXXXII," meets the eye. The same inscription, in the Russian language, appears on the opposite side. The area is enclosed within a handsome railing placed between granite pillars. The idea of Falconet, the French architect, commissioned to erect an equestrian statue to the extraordinary man at whose command a few scattered huts of fishermen were converted into palaces, was to represent the hero as conquering, by enterprise and personal courage, difficulties almost insurmountable. This the artist imagined might be properly represented by placing Peter on a fiery steed, which he is supposed to have taught by skill, management, and perseverance, to rush up a steep and precipitous rock to the very brink of a precipice, over which the animal and the Imperial rider pause without fear and in an attitude of triumph. The horse rears with his fore-feet in the air, and seems to be impatient of restraint, while the sovereign surveys, with serene countenance, his capital rising out of the waters, over which he extends the hand of protection. The bold manner in which the group has been made to rest on the hind-legs of the horse only, is not more surprising than the skill with which advantage has been taken of the allegorical figure of the serpent of envy spurned by the horse, to assist in upholding so gigantic a mass. This monument of bronze is said to have been cast at a single jet. The head was modelled by Mademoiselle Calot, a female artist of great merit, and is admitted to be a strong resemblance of Peter.

The height of the figure of the Emperor is 11 feet; that of the horse, 17 feet. The bronze is in the thinnest part the fourth of an inch only, and one inch in the thickest part: the general weight of metal in the group is equal to 36,636 English pounds.

A venerable Russian nobleman, who was living at St. Petersburgh when this monument was in progress, informed Dr. Granville, that as soon as the artist had formed his conception of the design, he communicated it to the Empress, together with the impossibility of naturally representing so striking a position of man and animal, without having before his eyes a horse and rider in the attitude he had devised. General Melissino, an officer having the reputation of being the most expert as well as the boldest rider of the day, to whom the difficulties of the architect were made known, offered to ride daily one of Count Alexis Orloff's best Arabians to the summit of a steep artificial mound formed for the purpose; accustoming the horse to gallop up to it and to halt suddenly, with his fore-legs raised, pawing the air over the brink of a precipice. This dangerous experiment was carried into effect by the General for some days, in the presence of several spectators, and of Falconet, who sketched the various movements and parts of the group from day to day, and was thus enabled to produce perhaps the finest, certainly the most correct, statue of the kind in Europe.

It will be always a matter of regret to the admirers of the sublime in the fine arts that the chisel of Falconet, which had been so successfully employed in giving to the world so perfect a group, should have interfered with the rude form and outlines of the gigantic block of granite selected for its support. The paring, and bevelling, and scooping out, to which the original rock was subjected, have greatly injured the grand and imposing effect it would otherwise have had; have diminished the size of this unique pedestal to almost incorrect proportions; and given it the appearance of an artificial inclined plane, where a rude and broken rock, with its natural and picturesque angles and fractures, was required.

DECIMAL FRACTIONS.

In continuation of a former number, we now proceed to explain the species of fractions which are called *decimal*, a word derived from the Latin *decem*, ten. In doing this it will be necessary to enter upon the decimal system generally, and to point out the features which distinguish our arithmetic from that of ancient times. The Greeks and Romans reckoned as we do, by tens; that is to say, having given names to the first ten numbers, they made these names serve to reckon all numbers as far as ten tens, or one hundred, for which a new name was introduced; with this they proceeded as far as ten hundreds, or one thousand, where again a new name was adopted. In the symbols by which they represented numbers, they were not fortunate; and the Roman method especially, which is often used amongst us, is so clumsy as to make it no matter of wonder why that people never cultivated arithmetic with success. Our method came originally from India through the Moors, who brought it into Spain. It enables us to represent all numbers by means of ten symbols, one denoting nothing, and the rest standing for the first nine numbers. The value of a figure depends not only upon the number which it represents when it stands alone, but also upon the place or column in which it is found. Thus, in 2222 yards, the two on the right hand stands for two yards only; the next to it for 2 tens of yards, or twice ten yards, or twenty yards; the next for two tens of tens of yards, or two hundred yards; the next for two tens of hundreds of yards, or two thousand yards. It is necessary to recall this, which is well known to all our readers, and in which the superiority of the modern system consists, in order to show how simply fractions may be represented by an extension of the same method. In the number 11111, if we proceed from left to right, each unit is the tenth part of the one which preceded it. Thus the first 1 is ten thousand, the second one thousand, the third one hundred, and so on. The last 1 is simply a unit, which may, introducing fractions, be divided into ten parts, each of which will be one-tenth of the unit, and will be represented in the common way by $\frac{1}{10}$. If we would carry on the notation just explained, in the case of 11111, we may place one more unit on the right, and agree that it shall stand for $\frac{1}{10}$ of the unit. This would give 11111 1, in which the separation is made to avoid confounding this, which is eleven thousand one hundred and eleven yards and one-tenth of a yard, with 111111, which is one hundred and eleven thousand one hundred and eleven yards. In the same way in 11111 1111, the first 1 after the unit's place, or the first which is separated from the rest, stands for one-tenth of a yard, the second for one-tenth of a tenth, or one-hundredth of a yard, the third for a tenth of a hundred of a yard or one-thousandth of a yard, and the fourth for one-tenth of a thousandth, or one-ten-thousandth part of a yard. Instead of a separation, it is usual to mark a point after the unit's place, and all figures which come before the point are whole yards, pounds, acres, &c., as the case may be, while all which come after the point are fractions of the same. Thus 12·34 yards stands for 12 yards, 3 tenths of a yard, and 4 hundredths of a yard; ·768 stands for 7 tenths, 6 hundredths, and 8 thousandths. The cipher is used in the same way as in whole numbers, viz. to keep each number in its proper place. Thus one-hundredth is distinguished from one-tenth by writing the first ·01, and the second ·1, since the second column on the right of the point is appropriated to hundredths, and the first to tenths. Thus ·308 is three tenths and eight *thousandths*; ·0308 is 3 hundredths and 8 ten-thousandth parts.

These fractions may be represented in another way. Thus, ·123, which is one-tenth, 2 hundredths, and 3 thousandths, is also 123 thousandths, or one hundred and twenty-three parts out of a thousand. For if we

divide the unit into 1000 parts, one-tenth is 100 of these parts, one hundredth is 10, and two hundredths are 20 of these parts, and 3 thousandths are three of these parts. Similarly ·76 is either 7 tenths and 6 hundredths, or 76 hundredths. The rule is:—To write a decimal fraction in the common way, let the numerator be the number which follows the point, throwing away ciphers from the beginning, if necessary; let the denominator be unity followed by as many ciphers as there are places of figures after the point. By the same rule a number and decimal fraction may be converted into one common fraction, the numerator being formed by throwing away the decimal point. Thus $7\cdot12$ is $7\frac{12}{100}$ or $\frac{712}{100}$.

The decimal point is always understood as coming after the unit's place, even when there are no fractions. Thus 16 is 16· or 16·000. And any number of ciphers may be placed after a decimal without altering its value. Thus ·4 and ·40 are the same, the first being 4 parts out of ten, and the second also 4 parts out of ten, or which is the same thing, 40 parts out of 100. No fraction can be converted into a decimal of *exactly* the same value, unless its denominator be either 5 or 2, or a product of some number of fives and twos, such as 250, which is the product of 5, 5, 5, and 2. For the changing a common into a decimal fraction is the finding a second fraction, equal in value to the first, and whose denominator shall be one of the series of *decimal* numbers, 10, 100, 1000, &c. There is only one way of altering the terms of a fraction without altering its value, viz. by multiplying or dividing both numerator and denominator by the same number. It will easily be found by experiment, and it is proved in books of algebra, that a *decimal* number, that is, a unit followed by ciphers, is not divisible by any number except it be either 2, 5, or a product of twos and fives. Hence it is impossible that a multiplier can be found for 7, for example, which shall make the product a decimal number; for if so, since the product is always divisible by the multiplicand, there would be a decimal number divisible by 7, which is impossible.

Hence there is no decimal fraction exactly equal to $\frac{1}{7}$, or $\frac{1}{9}$, or $\frac{1}{13}$, and so on. Nevertheless, a decimal fraction can be found as near as we please to any fraction whatever; that is, if we take $\frac{2}{13}$, and take any fraction as small as we please, for example, $\frac{1}{100000}$ or ·00001, we can find a decimal fraction which shall not differ from $\frac{2}{13}$ by so much as ·00001; and if we please, we can come still nearer than that small difference. Suppose it is required to find a decimal fraction which shall not differ from $\frac{2}{13}$ by so much as $\frac{1}{1000}$ or ·001. Multiply the numerator and denominator by 1000, which gives $\frac{2000}{13000}$. The numerator 2000, divided by 13, gives the quotient 153 and the remainder 11; so that both 2000 diminished by 11, and 2000 increased by 2, are divisible by 13, that is, 1989 and 2002 are divisible by 13, and give the quotients 153 and 154. Of the three fractions $\frac{1989}{13000}$ $\frac{2000}{13000}$ and $\frac{2002}{13000}$, which have the same denominator, the first is the least, the third is the greatest, and the second lies between the first and third. But the first and third (dividing both numerator and denominator by 13) are $\frac{153}{1000}$ and $\frac{154}{1000}$ or ·153 and ·154, and the second is the same as $\frac{2}{13}$. The first and third differ from one another by $\frac{1}{1000}$ or ·001; hence the second, which lies between them, does not differ by so much as $\frac{1}{1000}$ from either. We have, therefore, two decimal fractions ·153 and ·154, the first a little less, and the second a little greater, than $\frac{2}{13}$, each within $\frac{1}{1000}$ of $\frac{2}{13}$. The rule derived from this process is—To find a decimal fraction which shall not differ from a common fraction by so much as $\frac{1}{1000\&c.}$, annex as many ciphers to the numerator as there are ciphers in 1000 &c., divide by the denominator, and cut off by the decimal point from the quotient as many places as there were ciphers in 1000 &c., completing the number, if necessary, by adding ciphers to the left, and taking no account of the remainder. Thus $\frac{365}{18}$ is within $\frac{1}{1000000}$ of 20·277777.

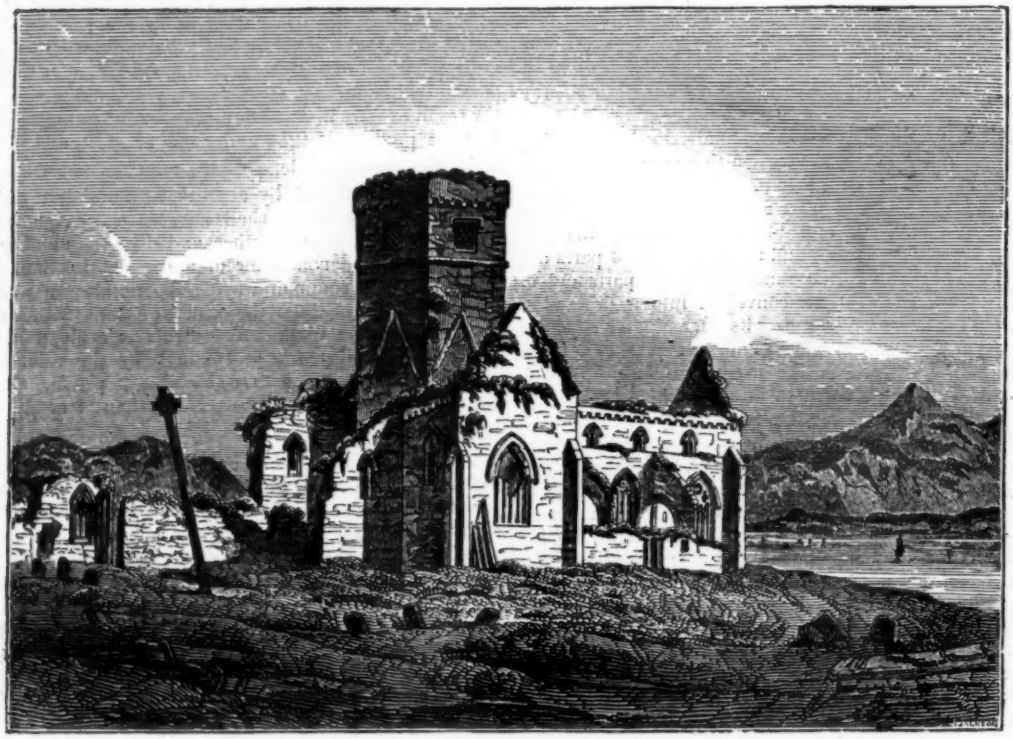
The rules for addition, subtraction, multiplication, and division, of decimal fractions, are very similar to those in whole numbers. In addition and subtraction the decimal points are to be placed under one another, which will bring units under units, tens under tens, tenths under tenths, &c. The process is then precisely the same as in whole numbers, the decimal point in the result being placed under the other points. In multiplication we must proceed to multiply as if there were no decimal points, and afterwards make as many decimal places in the result as were in both the multiplier and multiplicand. For the product of ·238 and ·112 or $\frac{238}{1000}$ and $\frac{112}{1000}$ is, by the common rule, $\frac{26656}{1000000}$: and as one decimal number is multiplied by another by forming a third decimal number, which shall have as many ciphers as both the former ones together, and since the number of ciphers in the denominator of a decimal fraction, expressed in the common way, is the number of places which it will have when the point is substituted for the denominator, the reason of the rule is evident. The product obtained above is ·026656 by the rule, one cipher being necessary to make up six places. It is moreover evident that $\frac{26656}{1000000}$ is less than ·1 or $\frac{1}{10}$, the latter being $\frac{100000}{1000000}$.

The rule for division of one decimal by another, as given in many books of arithmetic, is likely to mislead the student in various cases. From the following principles a rule may be drawn which will apply to every possible case. If there be no decimals, either in the dividend or divisor, the rule has been already explained. Thus the division of 17 by 6 is the same thing as the reduction of $\frac{17}{6}$ to a decimal fraction, since, as we showed in our former paper, the sixth part of unity repeated 17 times is the sixth part of 17. Again, we must observe that when two fractions have the same denominator, their quotient is the same as the quotient of their numerators. Thus $\frac{2}{5}$ is contained in $\frac{17}{5}$, just as 2 is contained in 17. By the rule, $\frac{17}{5}$ divided by $\frac{4}{5}$ gives $\frac{85}{20}$, which having the numerator and denominator both divisible by 3, is the same as $\frac{17}{4}$. If then two fractions have the same denominator, the denominator may be rejected in division, and the one numerator divided by the other. Two decimal fractions may be reduced to the same denominator, by annexing ciphers to the right of that which has the fewest number of places, so as to make the same number of places in both. For we have shown that a decimal is not altered by annexing ciphers on the right, and we know that two decimals which have the same number of places have the same denominator, viz. unity followed by as many ciphers as there are places. If then we have to divide 42·1 by ·0017 we begin by annexing three ciphers to 42·1 which gives 42·1000 and ·0017, which having the same denominator, we retain only the numerators, which are 421000 and 17. It only remains to reduce $\frac{421000}{17}$ to a decimal fraction, to do which, we annex as many *more* ciphers to the numerator as we want decimal places. Thus, if we want 4 places we divide 421000,0000 by 17, the quotient of which, taking no account of the remainder, is the answer required. Again, to divide 4·03812 by 1161·7 we annex four ciphers to the latter, and reject the denominators, which gives 403812 and 116170000. We then reduce $\frac{403812}{116170000}$ to a decimal fraction; but in doing this, the rule may be somewhat simplified, since the annexing a cipher to the numerator is the same thing as taking one away from the denominator; thus $\frac{4038120}{116170000}$ is the same fraction as $\frac{40381}{1161\cdot000}$. If therefore we want five places of decimals, instead of annexing five ciphers to the numerator, we take away the four from the denominator and annex

one to the numerator, and divide 4038120 by 11617, the quotient of which is 347; and as there are to be 5 decimal places, the result is ·00347. Similarly to divide 42 by ·007, we divide 42000 by 7, which gives 6000.

When any decimals are thrown away from a result, it is more correct to increase the last remaining figure by 1, if the first figure thrown away were 5 or upwards. Thus, if out of ·13885, we retain only four places, we write it ·1389, this being nearer to ·13885 than ·1388 If we retain 3 places only, we write ·139. On the same principle, if we had to mention 278 in round numbers, we should rather call it 300 than 200.

IONA.



[Exterior View of the Cathedral Church of St. Mary, at Iona.]

ABOUT three miles south from Staffa, of which we gave an account in a late number, and within a mile of the southern extremity of Mull, lies the famous Iona—"once," in the language of Dr. Johnson, "the luminary of the Caledonian regions, whence savage clans and roving barbarians derived the benefits of knowledge and the blessings of religion." The name Iona is merely the Celtic term *I-thona*, (the *th* not pronounced,) signifying the Isle of Waves. Iona is now commonly called I (pronounced *ee*), that is, the Isle—a name which seems to have been bestowed upon it by way of pre-eminence in very remote times. It is so designated by Bede, who wrote in the beginning of the eighth century. It is sometimes also more formally or emphatically distinguished as I-colm-kill, that is, the Isle of Columba's Cell.

Iona is larger than Staffa, but still of very limited dimensions, being only about three miles in length from south-west to north-east, and scarcely a mile across at its greatest breadth. On the west side the coast is for the most part rocky; but on the east it is more level. The two principal plains are at the northern extremity of the island, one called the Bay of Martyrs, on the west side; the other, that on which the village is built, looking to the east. The population, consisting now of about ninety families, or 450 individuals, is all collected in this last-mentioned corner. Iona has long enjoyed the reputation of extraordinary fertility; and all the old accounts celebrate its eminence in this respect. But the praises it has received are probably to be interpreted with a reference to its peculiar locality, and as meaning only that its soil was more productive than that of the desolate and savage regions by which it is surrounded.

There is reason to believe that this little isle was a sacred spot even long before it was shone upon by the light of Christianity. Here the Druids are supposed to have celebrated their mysterious and bloody rites; it is said to have then borne the name of Inish Druinish, the Island of the Druids; and a green eminence near the east coast is still distinguished by the epithet of their burying-place. It was probably the fame of its ancient sanctity which induced St. Columba to fix upon it as a residence for himself and his companions, when he came over from Ireland to convert the northern Scots, according to Bede, in the year 565. It is certain at least that here he established himself, having, it is said, obtained a grant of the island from the king who then reigned in Scotland.

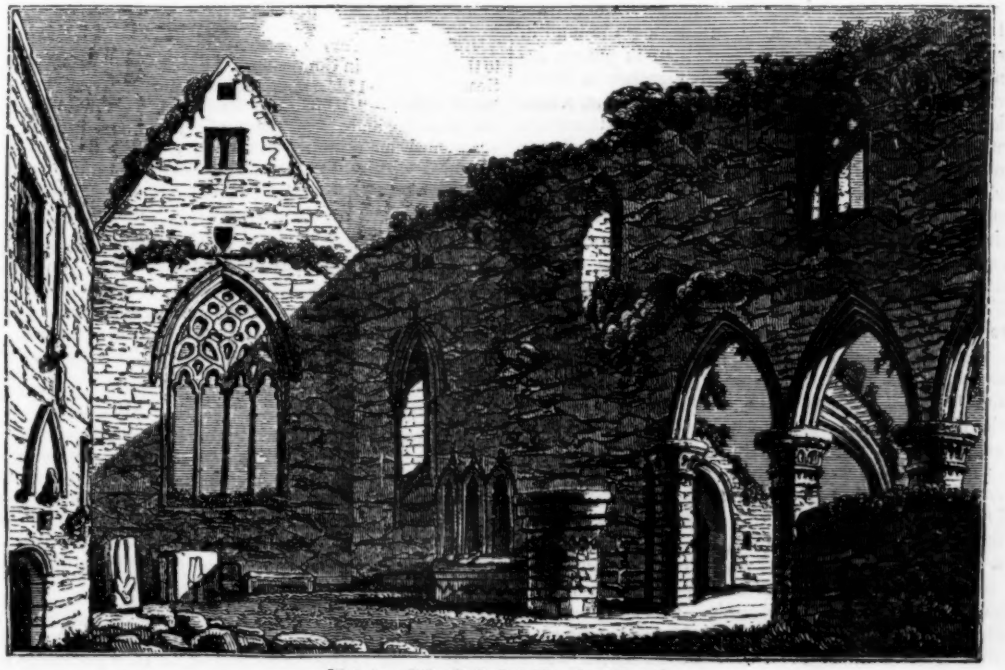
St. Columba must have been a man of no ordinary endowments, both natural and acquired, and far in advance of the dark and rude age in which he lived. Wherever he may have been educated, he appears to have been possessed of all the knowledge of his time; and may be considered to have introduced the light of letters as well as that of religion into the country of his adoption. Columba's works, which are in Latin, were published at Louvain in 1667, under the superintendence of Patrick Fleming, a countryman of his own. The saint is said to have died in 597.

Whatever may have been the exact nature of the institution established by St. Columba in Iona, it could hardly have been governed on any principle of monastic discipline, of which no trace is to be found in the history of the Church till long after his time. It rather appears to have been a seminary for the education of the priesthood, or what we should now call a theological

college. In Bede's time the discipline established by St. Columba still survived at Iona. Here and elsewhere the priests were denominated, not monks, but Culdees, from a Celtic term still in use, which signifies merely a person given to retirement and solitary meditation. The introduction of the papal rule eventually substituted every where for the Culdees some order of regular monks. At Iona the successors of Columba, after some centuries of undisturbed tranquillity, which their noted learning and sanctity procured for them, notwithstanding the continual contests of the barbarous and ferocious tribes by which they were surrounded, were at last in the year 807, driven from their ancient shelter by an incursion of the Danes, those unscrupulous pirates, whom even the cross rarely deterred when a booty worth the seizing tempted them on. After this the place remained for many years untenanted—till it was again taken possession of by a detachment of monks of the order of St. Benedict, from the famous Abbey of Cluny, who occupied it till the Reformation. After the Isle of Man ceased to be a part of the Scottish dominions, the Church of Iona was the Cathedral of the Bishop of the Isles; and that dignity it retained till the establishment of Presbyterianism. This and the other sacred buildings, however, which once existed on the island, were, according to the common account, reduced very nearly to the ruined state in which they now remain, at the era of the Reformation.

The principal monuments of the past which are yet to be seen at Iona are the ruins of the cathedral church of St. Mary, of a nunnery, of five chapels, and of a building called the Bishop's House. Of these buildings, the most ancient is, beyond all doubt, much more recent than the time of Columba. His erection was probably of wattles, the material then generally used for building in this country. Of the existing remains, Dr. Macculloch, who published a description of the Western Isles in 1819, is of opinion, that that called St. Oran's Chapel is the most ancient; and it may, perhaps, be referred to the Saxon age. Next to this edifice, in point of antiquity, may be reckoned the nunnery. The arches here are also round; and the foundation of the building may probably be referred to a period beyond the twelfth century. The most extensive ruin is that of the church, of which our wood-cut gives a representation. It is in the form of a cross, surmounted at the intersection of the nave and the transept by a square tower of about seventy feet in height. The length of the transept is 70 feet, and that of the body of the church, from east to west, 120 feet. Of this building, the part to the eastward of the tower, is apparently the most ancient; and it may probably be assigned to the thirteenth century. The arches are pointed, and the shafts of the pillars are cylindrical and plain, as they are usually found to be in buildings of the Norman age. The great window in the eastern gable of this church has been much admired. For a more minute description of the different buildings, the reader may consult Dr. Johnson's Journey to the Hebrides. When Dr. Johnson was here in 1773, the chapel of the nunnery was used as a cowhouse, and was covered to the depth of several feet with dung. The Doctor, accompanied by his friend Boswell, and their host Mr. Maclean, during the night they spent in Iona, lay together in a barn on straw, with their portmanteaus for their pillows. The eloquent passage with which Johnson introduces his account of the place was given as a distinct paragraph in our last number.

The monuments of the dead with which this sacred soil was formerly crowded, and many vestiges of which still remain, are perhaps more interesting than the dilapidated walls which rise in the midst of them. Forty-eight kings of Scotland, four of Ireland, and eight of Norway, are said to have been buried in Iona, in three separate enclosures, each bearing a Latin inscription, intimating to which class of the illustrious dead it was appropriated. These inscriptions seem to have been legible in Buchanan's days; but they are now wholly obliterated, and the royal cemetery indeed is reduced to a few slight ridges formed by some broken arches built under the ground. It is known by the name of the Ridge of Kings. Of the other tombs most of the inscriptions are in Saxon characters; but Dr. Macculloch states that there are also a few in which the Celtic language and alphabet are used, though among these he could discover none with dates. Among the ornamental sculptures the most interesting which he observed were some ancient ships.



[Interior of the Cathedral Church of Iona.]

POETRY OF COMMON LIFE.

THERE is a little book printed at Sheffield, bearing the title of 'Poetry of Common Life,' consisting of 198 pages of selections from the poetry of Wordsworth, Crabbe, Bloomfield, Southey, Goldsmith, Campbell, Burns, Bowles, and one or two others less celebrated. These names will give to most readers a notion of what they may expect to find; but, to those who are not acquainted with the works of any of the writers named, we should say, that the poems selected relate to very natural and simple things, are always easy to be understood by unlearned persons, and, for the most part, touch those feelings and affections which are common to all mankind.

The preface explains how the various sorts and styles of poetry have arisen, and the writer then says, "Though all men have the same feeling, yet at different times and in different classes of society some feelings will be predominant over others; nor will the same feelings always be excited in the same way. For instance, a very rude people will be most delighted by the poetry which tells of the warlike actions of their fathers: a religious people will be most fond of devotional poetry: a people in a very high state of refinement will enjoy a poetry which goes deeply into the workings of our minds and affections, and awakens feelings absolutely unintelligible to men in a less advanced condition. But although all persons may thus be unable to enjoy the same poetry, yet every one would enjoy poetry of some kind or other, if he could meet with any of the kind suitable to his own case; that is, if it was addressed to those feelings which are most alive within his own breast, and expressed in language which he could understand." This is the reason why Crabbe and Goldsmith have always been popular. Their poetry is suitable to the case of the majority of the middle and lower classes in this country; they describe scenes and occurrences which are familiar in the course of every-day life in England; and they borrow nothing from times past, nothing from foreign countries, and nothing from mythology or romance. There is, therefore, no impediment to the common people relishing such pieces as 'The Mourner,' or 'The Village Alehouse,' and every reason why they should relish poetry of such a description. Again, Campbell's lines 'On the Departure of the Emigrants for New South Wales,' can scarcely fail to please and cheer the wanderers who have need of high and strong hopes in quitting the land of their fathers for distant countries. But, in poetry, excellence and universality go constantly together, of which a remarkable example may be found in Goëthe, whose works are held in admiration and reverence by the whole German world, for that great master knew well the chords that touched the hearts of his countrymen of all sorts and conditions. Sir Walter Scott's novels may be mentioned as an example of the same kind; and we should think it easy to select from Lord Byron's works an abundance of passages that would receive the stamp of pure gold if all mankind were to compose the jury of assayers.

We are happy to recommend this cheap volume; for there is great need in this country of raising, among the people, a sentiment of admiration for what is beautiful, and of kindling a spirit of enthusiasm towards all that is great and good in nature and in art. It would be a great mistake to suppose that the diffusion of such a spirit would lead to habits of idleness or the neglect of the cares of men's callings, or would divert their attention from the practice of their moral and religious duties. A poetical imagination is a source of continual refreshment amidst the labours and cares of a busy life, and if its influence cannot perpetually be preserved, it is the greater reason why its occasional presence is the more desirable. Life is, in truth, so short, that if men do not quickly begin to exercise those feelings which connect them with the unknown world, they will be in danger of passing through their term of existence altogether mechanically, like the machinery of a clock. The Germans use the word "liebe," love, as expressing the relish which the influence of poetry or sentiment gives for things otherwise uninteresting. Goëthe has said, "Life outweighs all things if love lies within it"—(Das leben uberwiegt alles, wenn die liebe in seiner schaale liegt); and this is true, both as expressing the influence of a poetic sentiment in raising the value of life, and as alluding to that double joy which animates every man who is sustained by the mutual love of the one object most dear to himself.

PAY OF SOLDIERS IN THE REIGN OF EDWARD III.

THE King's army in France, Normandy, and before Calais, besides the Lords, consisted of 31,294 combatants and attendants, and their pay for one year and 131 days amounted to £127,201 2*s.* 9*d.* The following specification of particulars will furnish an idea of the military pay and service of this time:—

"To Edward, Prince of Wales, being in the King's service in Normandy, France, and before Calais, with his retinue, for his wages of war 20*s.* a day; eleven bannarets, every one taking 4*s.* a day; 102 knights, each 2*s.* a day; 264 esquires, each 12*d.* a day; 384 archers on horseback, each 6*d.* a day; 69 foot archers, each 3*d.* a day; 513 Welshmen, whereof one chaplain at 6*d.* a day, one physician, one herald or cryer, 5 ensigns, 25 serjeants or officers over 20 men, each 4*d.* a day; 480 footmen, each 2*d.* a day.

"To Henry Earl of Lancaster, being in the King's service before Calais, with his retinue and one other earl, each 6*s.* and 8*d.* a day; eleven bannerets, each 4*s.* a day; 193 knights, each 2*s.* a day; 512 esquires, each 12*d.* a day; 46 men at arms and 612 archers on horseback, each 6*d.* a day.

"To William Bohun, Earl of Northampton, and his retinue, at the same rate.

"To Thomas Hatfield, Bishop of Durham, 6*s.* 8*d.* per day; 3 bannerets, 48 knights, 164 esquires, 81 archers on horseback, as above.

"To Ralf, Baron Stafford, and his retinue, as above."

These things appear in a contemporary record, published by Dr. Brady in his History of England. See vol. ii.—Appendix, p. 88.

Effects of the Scurvy.—Mr. Walker, who was the Chaplain to the Centurion in Commodore Anson's voyage to the South Seas in 1740—1744, thus describes the effects of scurvy on board ship:—"It often produced putrid fevers, pleurisies, the jaundice, and violent rheumatic pains; and sometimes it occasioned an obstinate costiveness, which was generally attended with a difficulty of breathing, and this was esteemed the most deadly of all the scorbutic symptoms: at other times the whole body, but more especially the legs, were subject to ulcers of the worst kind, attended with rotten bones, and such a luxuriancy of fungous flesh, as yielded to no remedy. But a most extraordinary circumstance, and what would be scarcely credible upon any single evidence, is, that the scars of wounds which had been for many years healed, were forced open again by this virulent distemper. Of this there was a remarkable instance in one of the invalids on board the Centurion, who had been wounded above fifty years before at the battle of the Boyne; for though he was cured soon after, and had continued well for a great number of years past, yet on his being attacked by the scurvy, his wounds, in the progress of his disease, broke out afresh, and appeared as if they never had been healed. Nay, what is still more astonishing, the callus of a broken bone, which had been completely formed for a long time, was found to be hereby dissolved, and the fracture seemed as if it had never been consolidated. Indeed, the effects of this disease were, in almost every instance, wonderful; for many of our people, though confined to their hammocks, appeared to have no inconsiderable share of health, and yet on their being the least moved, though it was only from one part of the ship to the other, have immediately expired." How gratifying is it to know that the scurvy is now almost entirely eradicated in

the navy. This desirable change has been produced partly by great attention to the cleanliness, diet, and comfort of the men, and partly by the constant use of the acid of lemon, which is a simple and effectual preventive. As long ago as the year 1600, Commodore Lancaster, on a voyage to the Cape of Good Hope, preserved his crew in health by administering three table spoonsful of lemon-juice every morning to each of his men; while on board the other three ships of his squadron, where this precaution was neglected, the hands were so short through disease, that the vessels were unmanageable. And yet lemon-juice was not generally used in the British navy till 1795. In 1780 there were 1457 cases of scurvy received into Haslar Hospital; in 1806 one case only.

CO-OPERATIVE LABOURERS.

Many of our readers are no doubt aware that some well-intentioned men have been endeavouring for a long time to effect a great change in society, by establishing a new arrangement, called Co-operation, which assumes that the labourers should be at the same time the capitalists. There can be no sort of objection to this principle, when it is proposed to carry it into action without any prejudice to the existing laws of property; and, no doubt, many of the evils of our social state might be removed, were all persons concerned in the business of production to have a sort of proprietary interest in the commodities produced. The mistake of those who exclusively call themselves co-operatives is, that of assuming that the love of individual property can be got rid of by a very short process of reasoning, and neglecting to avail themselves of the many *practical* modes in which industry might be made more productive than at present by a union of forces, in which the personal interests of every labourer would be dependant upon the success of the business in which he is engaged. There are many examples of such real co-operation already existing in the world, some of which we may mention, from time to time. We shall now state a few facts regarding the mode of navigating vessels in the Mediterranean, by men having a common proprietorship.

With the exception of some large ships that belong to wealthy merchants of Hydra, Spezzia, &c., chiefly employed on the corn trade in the Black Sea, nearly all the Greek vessels are navigated by men taking fixed shares of the profits or freights obtained. The captain has more shares than the common men, and so has the second in command, who is generally intrusted with the *contabiliti* or accounts. When the vessel is small and the voyage short, it is sometimes the custom for each individual to lay in his own wine and provisions; but the general practice is for the captain or the second to purchase a stock for the whole, the amount of which is put on the debtor side of the account, and at the end of the voyage subtracted from the gains made, the distribution being fairly conducted during the voyage. The same system is found nearly all over the Mediterranean. The Neapolitans, the Sicilians, and the Genoese, rarely navigate in any other way.

The Italian captain has sometimes a share in the vessel, which proportionately increases his share in the profits. He is occasionally, though rarely except when the craft is very small, the sole proprietor; but even in the latter case the men are engaged just in the same way. A small vessel called a "Bovo," or a "Paranza," of not more than sixty tons, not worth £150, is often held by as many as six or ten different proprietors.

From the town of La Torre dell' Annunziata in the Bay of Naples, there is a coral-fishery carried on. They sometimes fish about Sardinia, but the great place is on the coast of Africa near Bona. They leave Naples in little fleets of four, six, or eight open boats, and availing themselves of the fine summer season, venture right across the Mediterranean. These boats are navigated on the same principle. Sometimes the boat is the united property of the men in it, who give one of their number a larger share of the profit on account of his superior nautical skill or experience in the fishery. The abstemious manner in which these Mediterranean sailors (Italians, Greeks, Sclavonians, Spaniards, Provençals and all) live is astonishing. Bread, *legumes*, olives, salt-fish, a little maccaroni, are their sole support. They scarcely ever taste meat.

A large portion of the shore-boats that ply about the harbour at Smyrna, are manned by Sclavonians from about the Bocca di Cattaro, and by our subjects the Maltese. On an average each boat has two men; to them the boat belongs, and they divide their profits every evening. When an old boat is to be repaired, or a new one bought, the two partners club together; or sometimes, in the case of the purchase of a new boat, a third party is admitted, who receives a given share of what the boat makes.

In the Italian ships such of the sailors as have a little money are allowed to invest it in goods, and to carry these goods with them, disposing of them as they choose at the ports they touch at or are bound to. This is called the "*Paccotiglia*." Intelligent and prudent sailors often make more money this way than by their shares in freight.

Those who have attended to this system state that the sailors are deficient in discipline; but they also observe that in proportion as the men are of a steady and intelligent character, this evil vanishes. It is no doubt true that *mutual* interests can only be properly understood by men far advanced in civilization. Ignorance is always selfish.

THE WEEK.

November 24.—On this day, in the year 1713, was born at Clonmell, in Ireland, Laurence Sterne, the celebrated author of 'Tristram Shandy' and the 'Sentimental Journey.' His father was Roger Sterne, a lieutenant in the army, a younger son of Dr. Sterne, Archbishop of York. The subject of the present notice, therefore, although a native of Ireland, was, like Berkeley, Goldsmith, Swift, and several other men of original genius who have been born in that country, an Englishman by descent. He also received nearly the whole of his education in England, having been sent to school at Halifax, in Yorkshire, in 1722. Even at this early age he appears to have given such indications of the vivacity of his genius as arrested the attention of discriminating observers. One day, as he has himself related, he had been tempted to sorawl his name in large letters on the whitewashed wall of the school-room. The usher, on detecting the misdemeanour, sentenced the culprit to the usual punishment; but the master of the school on learning what had occurred, declared that the name should never be obliterated from the wall, as it was one which he was certain would in due time secure to itself no common distinction. On leaving school Sterne was entered of Jesus College, Cambridge, his friends having fixed upon the church as his profession. Their choice was, as too frequently happens, directed more by other considerations than by any regard to his inclination or fitness for the sacred office. Accordingly, when Sterne, some time after leaving the university, obtained, by the interest of a brother of his father, the living of Sutton in Yorkshire, he appears to have entered upon the enjoyment of its temporalities without giving himself much trouble about its duties. He spent his time, it is said, chiefly in shooting, in the practice of music and painting, and in light and discursive reading. In 1741 he married; and soon after, through a relation of his wife, he was appointed to the living of Stillington in the same county, which he held in conjunction with the former. He also enjoyed a prebend in the cathedral of York, which he owed to his uncle. This was all the preferment he ever obtained in the church till, after he had made himself known as a writer, Lord Faulconberg

bestowed upon him the living of Cawood, to which he then removed from Stillington. The first production which Sterne gave to the world, was a satirical effusion entitled 'The History of a Watchcoat.' But it was the two commencing volumes of his 'Tristram Shandy,' published in 1759, which first brought him into notoriety. Very rarely has the work of a new writer produced such a sensation as did this extraordinary performance. It at once established the fame of its author as one of the most original humorists his country had ever produced; and even the censure which it drew down upon him by the freedom of many passages contributed to his celebrity. Its continuation was eagerly expected; but the third and fourth volumes did not appear till 1761. The fifth and sixth were published in 1762; the seventh and eighth in 1764; and the ninth, which concluded the work, in 1766. Soon after its completion, Sterne, whose health had for some time shown symptoms of general decay, the effect, it has been stated, rather of indulgence than of his literary exertions, was advised to seek a chance of restoration in foreign travel; and accordingly he proceeded to France, taking his family with him. From France he pursued his way alone into Italy; but the excursion was not attended with the benefit expected from it. It produced, however, the 'Sentimental Journey,' the work of this author, perhaps, which has continued longest popular, and has always been the most general favourite. It appeared in the beginning of the year 1768; and a few weeks after, about the middle of March, the author expired at his lodgings in Bond-street, London, at the age of fifty-four. Besides 'Tristram Shandy' and the 'Sentimental Journey,' Sterne published, under the name of Yorick, two volumes of Sermons in 1760, and two volumes more in 1766; and the edition of his collected works in ten volumes, which appeared after his death, contains also several letters, essays, and other miscellaneous productions of his pen. No defence or apology can be offered for either the occasional licentiousness of Sterne's writings, or for the free and careless life, to call it no worse, which he led, so especially unbecoming the profession to which he belonged. The fine feelings, it is also asserted, which are so beautifully displayed in many of his delineations, were merely assumed for the occasion, or at any rate did not much influence his general conduct. With all his pretended sensibility, he is represented as having been in reality a man of an ill-temper and of a hard and selfish heart. The truth probably is, that he was at least incapable of acting upon any steady principle, or of pursuing any permanent good at the expense of a present sacrifice; and accordingly, we are told, that, though in the enjoyment for many years of a considerable income from his livings in the church, and his works together, he left nothing to his wife and daughter, when he died, but a load of debts. As a writer he is undoubtedly entitled to a high rank in his peculiar line. Attempts have been made to trace the peculiarities of his style to preceding writers; and Dr. Ferriar in particular has certainly convicted him of having borrowed many thoughts, and even the groundwork of some pretty long passages, from Burton's Anatomy of Melancholy and other old English works. Arbuthnot's famous Martinus Scriblerus has also been pointed out as the prototype of Tristram Shandy. Of all his predecessors, however, Rabelais is undoubtedly the writer who has the best right to be regarded as having been directly imitated by Sterne. We do not allude to particular passages, in which the one may be proved to have been a copier of the other, so much as to general resemblance of style and manner. There is in both the same nervous and idiomatic style, the same whimsicality of thought and allusion, the same intermixture of the most sagacious and profound remarks with the wildest absurdity, as well as the same wit and humour. In both, too, there is the same indelicacy—only far more frequent and reckless in Rabelais, whose satire is also animated in many places by a much more bitter spirit. But in this, or any other parallel which may be drawn to the disadvantage of Sterne's originality, it ought never to be forgotten that his highest attribute remains still all his own—his exquisite pathos. Of this there is nothing whatever either in Burton, or Arbuthnot, or Rabelais, or any other with whom he has been compared. None of these writers could have produced the stories of the Dead Ass, of Lefevre, of the Monk, or of Maria. Nay, none of them, we may venture to affirm, could have drawn or imagined anything so full of the eccentric and the ludicrous, and yet so mild, so attractive, and, with all its singularity, so true to nature, as the delineation either of my Uncle Toby or of Corporal Trim; though perhaps Cervantes might.

STERNE.

UNFADING BEAUTY.

[From a small volume of Poems, by Thomas Carew, Esq. London, 1640.]

He that loves a rosy cheek,
Or a coral lip admires,
Or from star-like eyes doth seek
Fuel to maintain his fires;
As old Time makes these decay
So his flames must waste away.

But a smooth and stedfast mind,
Gentle thoughts and calm desires,
Hearts with equal love combin'd,
Kindle never-dying fires:
Where these are not I despise
Lovely cheeks, or lips, or eyes.

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